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Determining the boundary layers in the plane problem for three-layer strips. Part 1

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Abstract

We propose an exact solution of the problem on a boundary layer (a stress-strain state decreasing away from the boundary) for three-layer strips (rods) whose layers are made of different materials. We use the asymptotic integration method to obtain boundary eigenfunctions and a characteristic equation for the parameter describing the boundary layer decay rate. We study how the middle layer material affects the boundary layer extent. © Allerton Press, Inc., 2008.

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